

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A computer-implemented method employed within a network of application server instances having a cluster architecture comprising: displaying a hierarchical tree structure having one or more tree nodes in a graphical user interface, each of the one or more tree nodes representing a resource of an application server instance within a cluster of application servers-server instances, each application server instance within the cluster of application servers server instances having a group of server nodes configured with a redundant set of application logic and associated data, and a dispatcher in communication with a central service associated with the cluster of application server instances, the central service having a locking service and a messaging service, wherein at least one of the tree nodes represents a service of the application server instance within the cluster of application server instances; selecting the tree node representing the service of the application server instance within the cluster of application server instances; displaying a list of one or more service references associated with the service represented by the selected tree node in the graphical user interface; and displaying a relationship value for each listed service reference, wherein the relationship value is to specify whether the listed service reference is to be automatically started when the service represented by the selected tree node is started.
  
2. (Original) The method of claim 1, wherein displaying the hierarchical tree structure having one or more tree nodes in the graphical user interface comprises:

displaying the hierarchical tree structure in a first window pane of the graphical user interface; and wherein displaying the list of one or more service references associated with the selected tree node in the graphical user interface comprises:

displaying the list of one or more service references associated with the service represented by the selected tree node in a second window pane of the graphical user interface.

3. (Original) The method of claim 2, wherein displaying the list of one or more service references associated with the selected tree node comprises:

displaying a service reference name, for each listed service reference, wherein the service reference name is to identify the service reference.

4. (Cancelled)

5. (Previously presented) The method of claim 1, wherein the displayed relationship value is hard, if the listed service reference is to be automatically started when the service represented by the selected tree node is started.

6. (Previously presented) The method of claim 1, wherein the displayed relationship value is weak, if the listed service reference is not automatically started when the service represented by the selected tree node is started.

7. (Previously presented) The method of claim 1, wherein displaying the list of one or more service references associated with the selected tree node further comprises:

displaying a service reference type for each listed service reference, wherein the service reference type is to specify a service reference type for the listed service reference.

8. (Original) The method of claim 7, wherein the displayed service reference type is one of

- a service type,
- a library type, and
- an interface type.

9. (Previously presented) The method of claim 1, further comprising:

selecting one of the listed service references; and  
providing a relationship value for the selected service reference to specify whether the selected service reference is to be automatically started when the service represented by the selected tree node is started.

10. (Currently amended) An apparatus comprising:

a graphical user interface; and  
a processor and logic executable thereon to  
display a hierarchical tree structure having one or more tree nodes in the graphical user interface, each of the one or more tree nodes representing a resource of an application server instance within a cluster of application servers server instances, each application server instance within the cluster of application servers server instances having a group of server nodes configured with a redundant set of application logic and associated data, and a dispatcher in communication with a central service associated with the cluster of application server instances, the central service having a locking service and a messaging service, wherein at least one of the tree nodes represents a service of the application server instance within the cluster of application server instances;

display a relationship value for each listed service reference, wherein the relationship value is to specify whether the listed service reference is to be automatically started when the service represented by the selected tree node is started;

select the tree node representing the service of the application server; and

display a list of one or more service references associated with the service represented by the selected tree node in the graphical user interface.

11. (Original) The apparatus of claim 10, wherein the graphical user interface comprises:

a Swing-based graphical user interface.

12. (Original) The apparatus of claim 10, wherein each of the one or more tree nodes comprises:

a managed bean to provide a management interface for the represented application server resource.

13. (Original) The apparatus of claim 10, wherein the processor and logic executable thereon to display the list of one or more service references associated with the service comprises a processor and logic executable thereon to display a service reference name, for each listed service reference, wherein the service reference name is to identify the service reference.

14. (Cancelled)

15. (Previously presented) The apparatus of claim 10, wherein the displayed relationship value is hard, if the listed service reference is to be automatically started when the service represented by the selected tree node is started.
16. (Previously presented) The apparatus of claim 10, wherein the processor and logic executable thereon further comprises:
  - a processor and logic executable thereon to
    - select one of the listed service references; and
    - provide a relationship value for the selected service reference to specify whether the selected service reference is to be automatically started when the service represented by the selected tree node is started.
- 17-19. (Cancelled)
20. (Currently amended) A system comprising:
  - a means for displaying a hierarchical tree structure having one or more tree nodes in a graphical user interface, each of the one or more tree nodes representing a resource of an application server instance within a cluster of application servers server instances, each application server instance within the cluster of application servers server instances having a group of server nodes configured with a redundant set of application logic and associated data, and a dispatcher in communication with a central service associated with the cluster of application server instances, the central service having a locking service and a messaging service, wherein at least one of the tree nodes represents a service of the application server instance within the cluster of application server instances;
  - a means for selecting the tree node representing the service of the application server;

a means for displaying a list of one or more service references associated with the service represented by the selected tree node in the graphical user interface; and

a means for displaying a relationship value for each listed service reference, wherein the relationship value is to specify whether the listed service reference is to be automatically started when the service represented by the selected tree node is started.

21. (Original) The system of claim 20, wherein the means for displaying the list of one or more service references comprises:

a means for displaying a service reference name, for each listed service reference, wherein the service reference name is to identify the service reference.

22. (Cancelled)

23. (Previously presented) The system of claim 20, wherein the displayed relationship value is hard, if the listed service reference is to be automatically started when the service represented by the selected tree node is started; and

the displayed relationship value is weak, if the listed service reference is not automatically started when the service represented by the selected tree node is started.

24. (Previously presented) The system of claim 20, further comprising:

a means for selecting one of the listed service references; and  
a means for providing a relationship value for the selected service reference to specify whether the selected service reference is to be automatically started when the service represented by the selected tree node is started.

25. (Currently amended) An article of manufacture comprising:

an computer-readable medium providing instructions that, when executed by an apparatus, cause the apparatus to

display a hierarchical tree structure having one or more tree nodes in a graphical user interface, each of the one or more tree nodes representing a resource of an application server instance within a cluster of application servers server instances, each application server instance within the cluster of application servers server instances having a group of server nodes configured with a redundant set of application logic and associated data, and a dispatcher in communication with a central service associated with the cluster of application server instances, the central service having a locking service and a messaging service, wherein at least one of the tree nodes represents a service of the application server instance within the cluster of application server instances;

select the tree node representing the service of the application server; and

display a list of one or more service references associated with the service represented by the selected tree node in the graphical user interface; and

display a relationship value for each listed service reference, wherein the relationship value is to specify whether the listed service reference is to be automatically started when the service represented by the selected tree node is started.

26. (Original) The article of manufacture of claim 25, wherein the instructions that, when executed by the apparatus, cause the apparatus to display the list of one or more service references cause the apparatus to

display a service reference name, for each listed service reference, wherein the service reference name is to identify the service reference.

27. (Cancelled)

28. (Previously presented) The article of manufacture of claim 25, wherein the displayed relationship value is hard, if the listed service reference is to be automatically started when the service represented by the selected tree node is started; and  
the displayed relationship value is weak, if the listed service reference is not automatically started when the service represented by the selected tree node is started.
29. (Previously presented) The article of manufacture of claim 25, wherein the instructions that, when executed by the apparatus, cause the apparatus to display the list of one or more service references further cause the apparatus to display a service reference type for each listed service reference, wherein the service reference type is to specify a service reference type for the listed service reference.
30. (Cancelled)